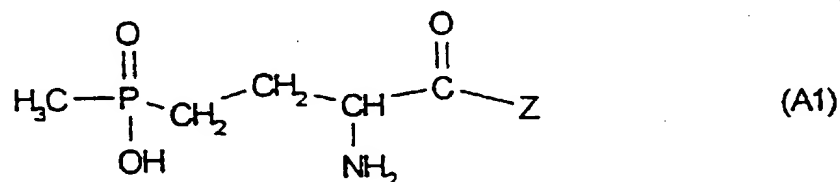


Patent claims:

1. The use of herbicide combinations for controlling harmful plants in sugar beet crops, wherein the herbicide combination in question comprises an effective content of

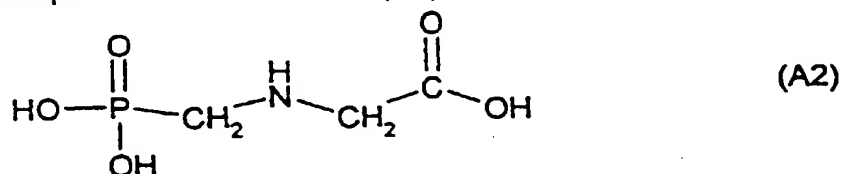
(A) a broad-spectrum herbicide from the group of the compounds consisting of

(A1) compounds of the formula (A1)



- in which Z is a radical of the formula -OH or a peptide residue of the formula -NHCH(CH₃)CONHCH(CH₃)COOH or -NHCH(CH₃)CONHCH[CH₂CH(CH₃)₂]COOH, and its esters and salts, and other phosphinothricin derivatives,

(A2) compounds of the formula (A2) and their esters and salts,



(A3) imidazolinones and their salts,

and

(B) one or more herbicides from the group of the compounds consisting of

- (B0) one or more structurally different herbicides from the abovementioned group (A) or
- (B1) foliar- and predominantly soil-acting herbicides which are active against monocotyledonous and dicotyledonous harmful plants, or
- (B2) herbicides which are active predominantly against dicotyledonous harmful plants, or
- (B3) herbicides which are predominantly foliar-acting and which can be employed against monocotyledonous harmful plants, or
- (B4) herbicides which are both foliar- and soil-acting and which can be employed against monocotyledonous harmful plants,

and the sugar beet crops tolerate the herbicides (A) and (B) which are present in the combination, if appropriate in the presence of safeners.

2. The use as claimed in claim 1, wherein glufosinate-ammonium is employed as active ingredient (A).

3. The use as claimed in claim 1, wherein glyphosate-isopropyl-ammonium is employed as active ingredient (A).

4. The use as claimed in any of claims 1 to 3, wherein one or more herbicides from the group consisting of
(B0) one or more structurally different herbicides from the abovementioned group (A) or
(B1) ethofumesate, chloridazon, triflursulfuron and its esters and metamitron or
(B2) desmedipham, phenmedipham, quinmerac and clopyralid and their salts or
(B3) quizalofop-P, quizalofop, fenoxaprop-P, fenoxaprop, fluazifop-P, fluazifop, haloxyfop, haloxyfop-P, cyhalofop and salts and esters of the last-mentioned nine active ingredients and clodinafop and propa-quizaop or
(B4) sethoxydim, cycloxydim and clethodim
or from among herbicides of more than one of groups (B0) to (B4) are employed as component (B).

5. The use as claimed in any of claims 1 to 4, wherein the herbicide combinations are used in the presence of further active ingredients used in crop protection.

6. The use as claimed in any of claims 1 to 5, wherein the herbicide combinations are used together with auxiliaries conventionally used in crop protection and formulation auxiliaries.

7. A method of controlling harmful plants in tolerant sugar beet crops, which comprises applying the herbicides or herbicide combination as defined in one or more of claims 1 to 5 jointly or separately, pre-emergence, post-emergence or pre- and post-emergence to the plants, plant organs, plant seeds or the area under cultivation.

8. A herbicidal composition, which comprises a combination of one or more herbicides (A) as defined in one of claims 1 to 3 and one or more herbicides from the group
- 5 (B1') ethofumesate, chloridazon, triflursulfuron and metamiltron or
(B2') desmedipham, phenmedipham, quinmerac and clopyralid or
(B3') quizalofop-P, fenoxaprop-P, fluazifop-P, haloxyfop, haloxyfop-P and cyhalofop or
(B4') sethoxydim, cycloxydim and clethodim or
- 10 a combination of a plurality of herbicides of groups (B1') to (B4') and, if appropriate, formulation aids and additives conventionally used in crop protection.
9. The use of the composition as defined in any of claims 1 to 6 or claim 8 for regulating the growth of sugar beet plants.
- 15 10. The use of the composition as defined in any of claims 1 to 6 or claim 8 for controlling the yield or the constituents of sugar beet plants.